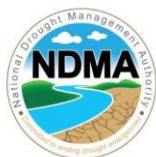


National Drought Management Authority

NAROK COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JUNE 2018



A Vision 2030 Flagship Project



JUNE EW PHASE

Drought Situation & EW Phase Classification

Biophysical Indicators

- **Rainfall**
- The long rains season performed above normal and ceased towards the end of May. Very little precipitation was recorded in June.
- **Vegetation condition:**
- The vegetation greenness as depicted by the vegetation condition index (VCI) is above normal greenness across the county.

Socio Economic Indicators (Impact Indicators)

Production indicators:

- The on-going farming activities include harvesting of green maize in Narok North, Narok South and Transmara region. Most crops are at flowering and grain filling stage.
- Livestock body condition ranged from fair to good in the pastoral livelihood zone and good in the mixed farming and the agro-pastoral livelihood zones.
- Milk production is stable and within the normal range compared to the long term average.

Access indicators:

- Terms of trade were not favorable in the mixed farming and the agro-pastoral livelihood zones but were stable in the pastoral livelihood zone.
- Milk consumption ranged from fair to good in all the livelihood zones.
- Water access for both human and livestock consumption was good in all the livelihood zones.

Utilization Indicators:

- Malnutrition cases are stable and are below the normal range as indicated by percent of mid upper arm Circumference (MUAC).

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
AGRO PASTORAL	NORMAL	STABLE
MIXED FARMING)	NORMAL	STABLE
PASTORAL	NORMAL	STABLE
COUNTY	NORMAL	STABLE
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	-	>90%
VCI-3Month	68.23	>35
Forage condition	Good	Good
Production indicators	Value	Normal
Crop Condition (Maize)	Normal	Normal
Livestock Body Condition	Fair-good	Good
Milk Production in litres	2.9	>5
Livestock Migration Pattern	Normal	Normal
Livestock deaths (Drought related)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	85	>100
Milk Consumption in litres	2.1	>4
Return distance to water sources in km	2.6	<5
Cost of water at source in Kshs (20 litres)	2-5	<5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	7	<10

<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase 	<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) 	<ul style="list-style-type: none"> ▪ Short rains ▪ Planting/weeding 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- There was an early onset of long rains which started in the third dekad of February. The rains have continued throughout the months of March, April and mid-May. The rains ceased towards the end of May.
- The cold season was experienced throughout the month of June with very little precipitation being reported.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

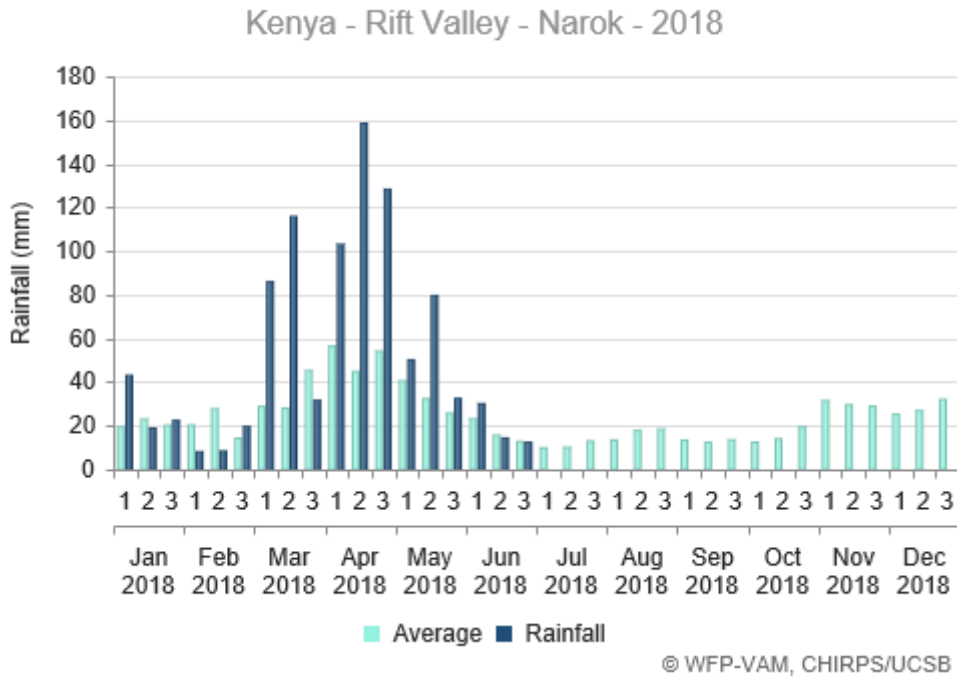


Figure 1

- The above satellite image highlights the general performance of the rains in the county for the month of June. A drastic decline in rainfall amount was recorded in June compared to last month as shown in Figure 1 above.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

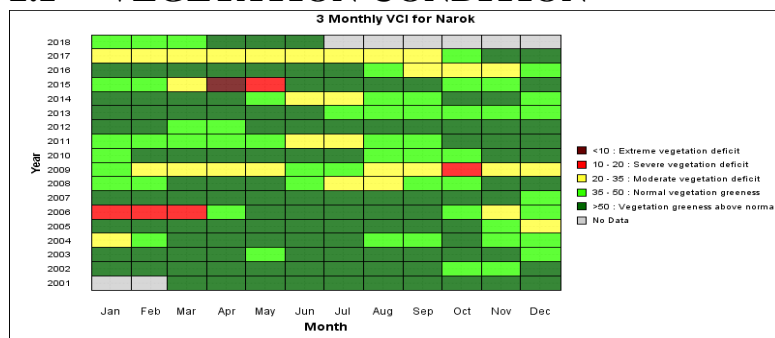


Figure 2

The vegetation greenness as depicted by the vegetation condition index (VCI) shows above normal vegetation greenness as shown in Figure 2.

2.1.1 Field observations

2.1.1.1 Pasture

- The pasture quantity and quality in mixed farming and agro pastoral livelihood zones remained good. In pastoral livelihood zone, pasture conditions ranged from fair to good. The pasture conditions in Mosiro Ward in Narok East sub county and Naroosura ward in Narok south sub county have improved compared to last month due to rains received in the county during the long rains season.
- The available pasture is likely to last for more than four months in mixed farming and agro-pastoral livelihood zones. In pastoral livelihood zone, pastures are likely to last for more than three months.
- The current pasture situation is within the normal range.

2.1.1.2 Browse

- The quality and quantity of browse in all the livelihood zones remained good. The available browse is expected to last for more than five months in mixed farming livelihood zone while in pastoral livelihood zone, it is likely to last for more than four months.
- The current browse situation is above the normal range.

2.2 Water resources

2.2.1 Sources

- The main sources of water for livestock and human consumption in the county were rivers, pans/dams and shallow wells as shown by Figure 3.
- The quantity and quality of water remained good in all the livelihood zones with rivers, pans and dams being the most used.
- In pastoral livelihood zone, water quality ranged from fair

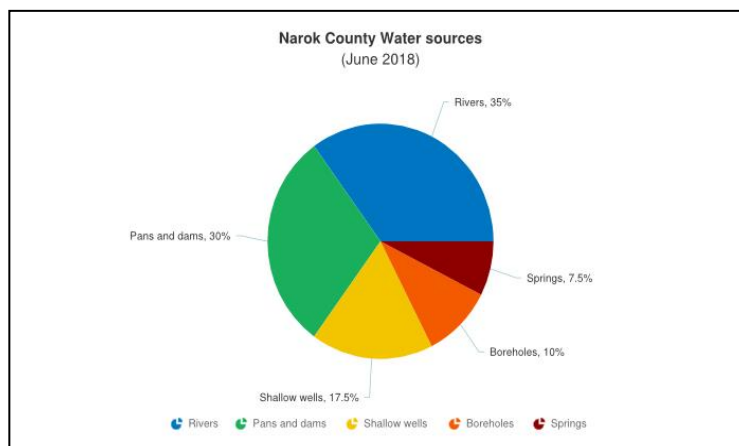


Figure 3

to good even though some of the pans are silted. In mixed farming and agro pastoral livelihood zones, water quality was good and this was attributed to recharge of water sources in the county during the long rains season.

- The current water sources are expected to last for more than four months in mixed farming and agro-pastoral livelihood zones. In pastoral livelihood zone, the water is likely to last for at least three months.
- The status of main sources of water is above normal at this time of the year.

2.2.2 Household access and Utilization

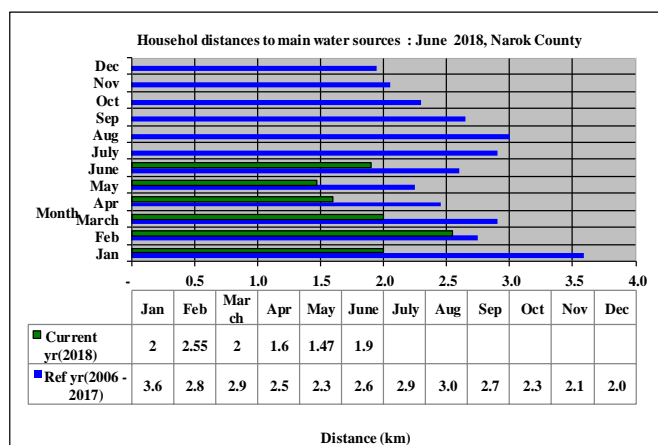


Figure 4 compared to the long term means as shown by Figure 4.

The average distance to watering points for households increased by 29% compared to the previous month.

Pastoral livelihood zone recorded the longest average return distance of five km, an increase from 3.5 km last month while the shortest average distance was recorded in mixed farming livelihood zone at 0.5km depicting a slight increase from 0.3 km. The increase in trekking distance is due to caseation of the rains in the county.

The current trekking distances to water

points were below the normal range

2.2.3 Livestock access

The average distance to main water sources from grazing areas increased by 18% compared to the previous month. Pastoral livelihood zone recorded the longest distance of six km while the shortest distance was recorded in the mixed farming livelihood zone at 0.5 km. The current average trekking distance is below the normal range at this time of the year as shown in Figure 5.

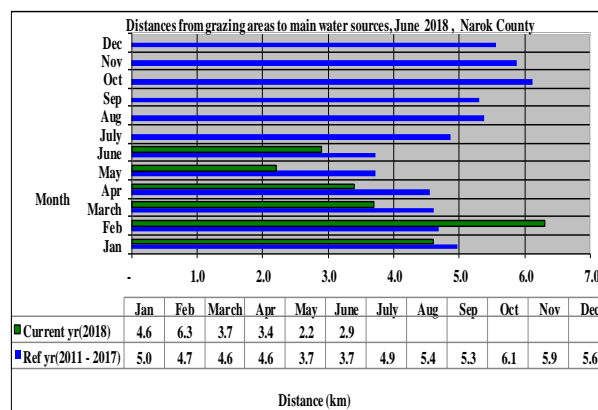


Figure 5

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

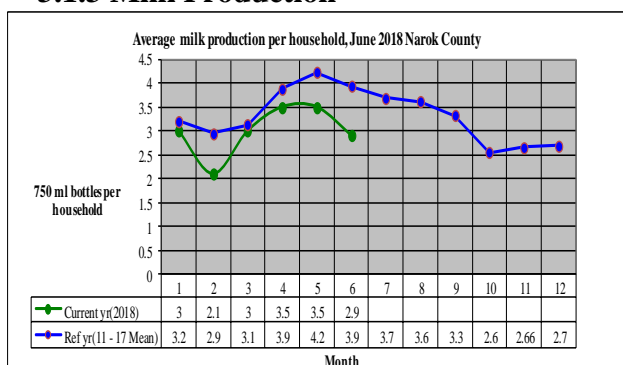
3.1.1 Livestock Body Condition

- The cattle body condition remained good in the mixed farming and some parts in the agro-pastoral livelihood zones. Cattle body condition ranged from fair to good in the pastoral livelihood zone. The body condition for sheep and goats remained good across all livelihood zones compared to last month.
- The stability in livestock body condition is attributed to good forage condition and water availability.
- The current livestock body condition is normal at this time of the year.

3.1.2 Livestock Diseases

- There were no alarming disease outbreaks in the county except cases of pneumonia in small stocks which were being reported in Narok South, Narok East and Narok West sub-counties. This is due to heavy rains and chilly weather conditions being experienced in the county

3.1.3 Milk Production



The average milk production per household per day reduced by 19% compared to the previous month. The reduction in milk production was attributed to increased trekking distance in the pastoral livelihood zone. However, the current production is within the normal limit.

The current milk production rate is below the normal range at this time of the year as shown by Figure 6.

Figure 6

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- The crops planted in the County include beans, sorghum, maize, wheat and potatoes in Narok North, Kilgoris and Emurua Dikirr sub-counties.
- Harvesting of maize and beans is ongoing in some parts of the Mixed farming zone.
- The performance of crops was generally good and high yield has been recorded in areas of Transmara and Mau region this season.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

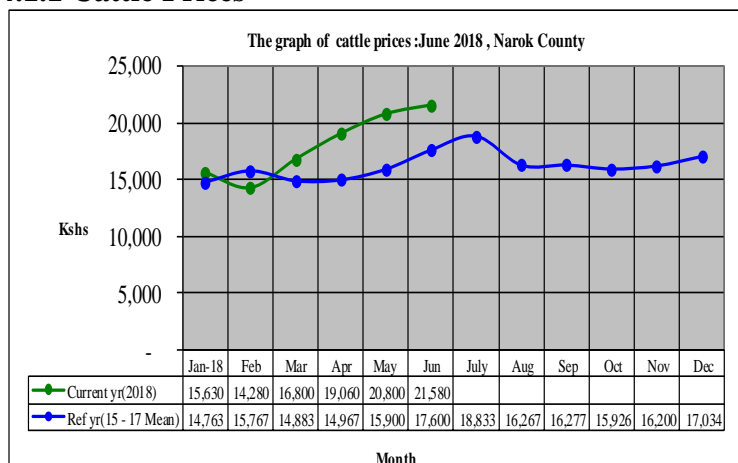


Figure 7
shown by Figure 7.

The average price for the medium sized cattle slightly increased by four percent compared to the previous month.

The highest prices were recorded in the pastoral livelihood zone at Kshs 30,000 per head and the lowest in the agro-pastoral livelihood zone at an average price of Kshs 17,000 per head.

The current cattle prices are above the normal range compared to long

term means at this time of the year as

4.1.2 Goat Prices

The average goat prices remained the same compared to the previous month. The stability in price is attributed to good body condition and forage availability in all the livelihood zones. The highest price was recorded in the mixed farming zone at Kshs 4,500 per head while the lowest price was recorded in the pastoral livelihood zone at Kshs 3,200 per head. The average goat price was above the normal range at this time of the year as shown by Figure 8.

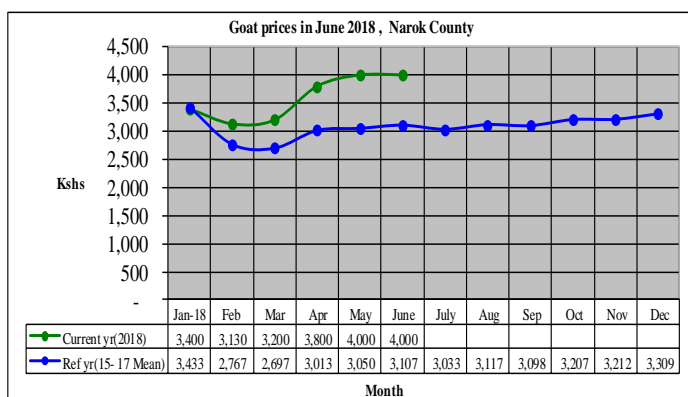


Figure 8

4.2 CROP PRICES

4.2.1 Maize

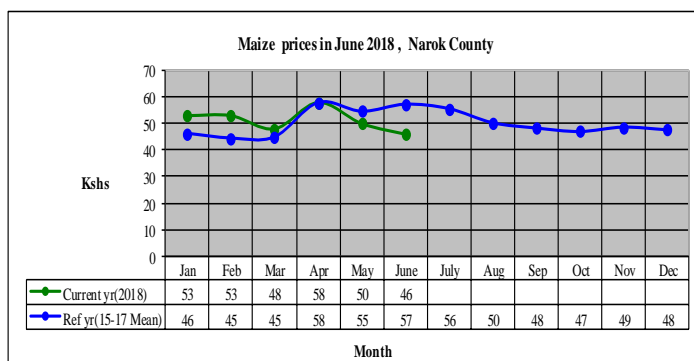
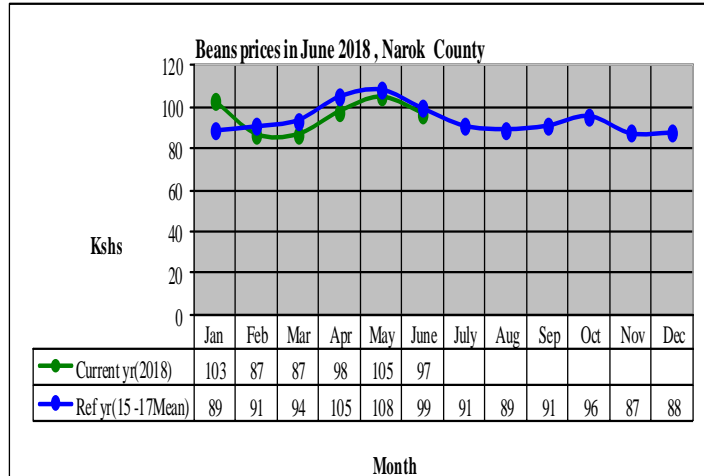


Figure 9

The average price of maize per kilogram reduced by eight percent compared to the previous month. The highest prices were recorded in pastoral livelihood zone at Kshs 75 per kg while the lowest was recorded in the mixed farming livelihood zone at an average price of Kshs 25per kg. The overall price is below the normal range as shown by Figure 9.

4.2.2 Beans

- The average price of beans reduced by eight percent compared to the previous month. The highest price was recorded in the agro-pastoral livelihood zone at Kshs. 120/kg compared to the mixed farming livelihood zone which recorded a lower price of Kshs.90 per kg.
- The current price is within the normal range at this



time of the year as shown by **Figure 10**
Figure 10.

4.3 Livestock Price Ratio/Terms of Trade

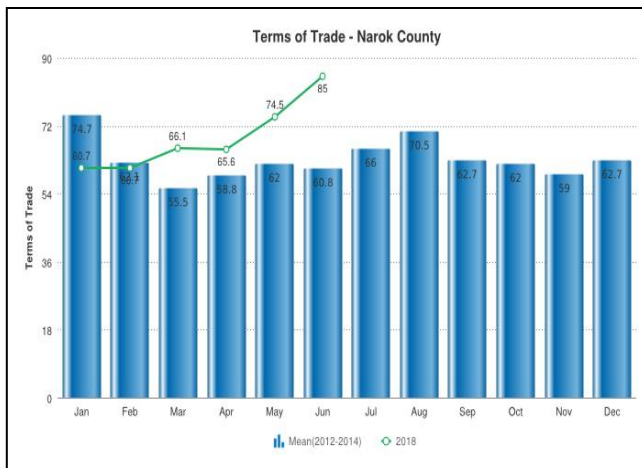


Figure 11

the normal range at this time of the year as shown in Figure 11.

The Terms of Trade (ToTs) based on the Cereal/Meat price ratio increased by 14 percent compared to last month. The increase was attributed to decrease in maize price and increase in goat price. This implies that a sale of one goat fetched 85kg of cereals. The ToTs were less favourable in the agro-pastoral and mixed farming livelihood zones compared to pastoral livelihood zone.

The cereal/meat price ratio is above

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

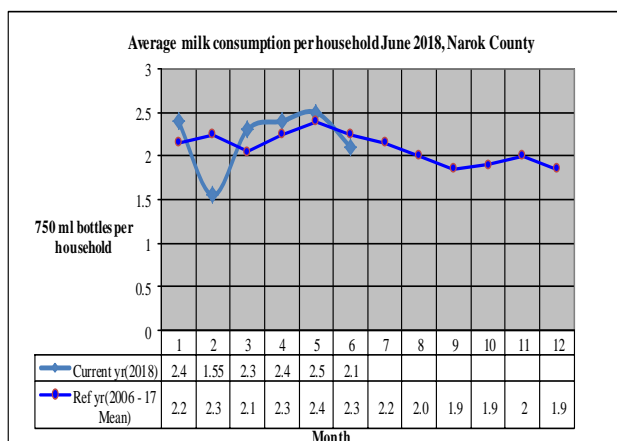


Figure 12

Average household milk consumption per day reduced slightly compared to the previous month. There was significant disparity in milk consumption across the livelihoods with agro pastoral livelihood zone having the highest consumption rate at seven litres, followed by mixed farming zone at five litres while the pastoral zone had the least consumption rate at one litre. The current milk consumption rate is within normal range at this time of the year as shown by Figure 12.

5.2 FOOD CONSUMPTION SCORE

- About 77%, 17% and 6% of the households fell within the acceptable, borderline and poor food consumption score categories respectively in the month under review.
- The poor food consumption score implies households are not consuming a balanced diet and rarely consuming food rich in protein. Borderline implies that households are consuming staples and vegetables every day accompanied by oil and pulses a few times in a week.

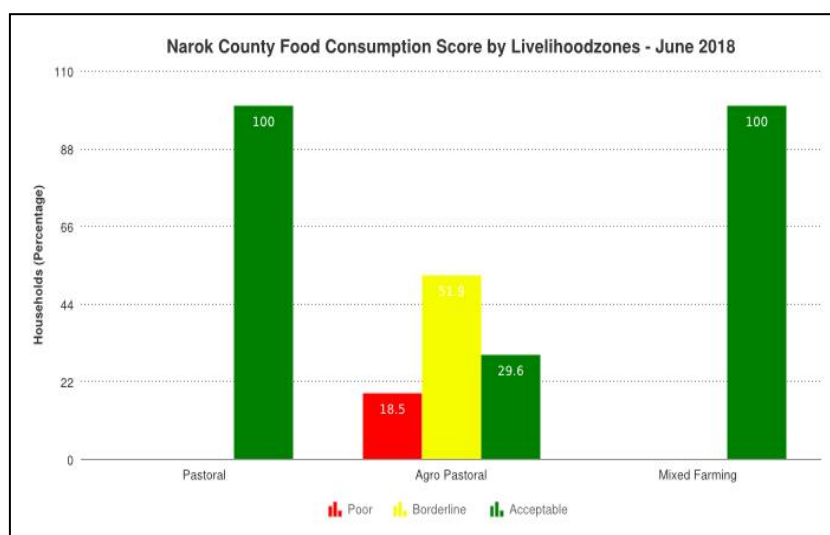


Figure 13

- The acceptable implies that households are consuming staples, protein (milk and meat) and vegetables every day and frequently accompanied by pulses.
- However, there was a significant variation across livelihood zones as shown in Figure 13 with mixed farming and pastoral livelihood zones having the bulk of their populations with acceptable food consumption scores. In agro-pastoral livelihood zone, the majority of the population had borderline food consumption scores. The inter-livelihood variation is attributed to high consumption of meat and milk in most households in the mixed farming livelihood zone and some parts of pastoral zone compared to those in the agro-pastoral livelihood zone.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

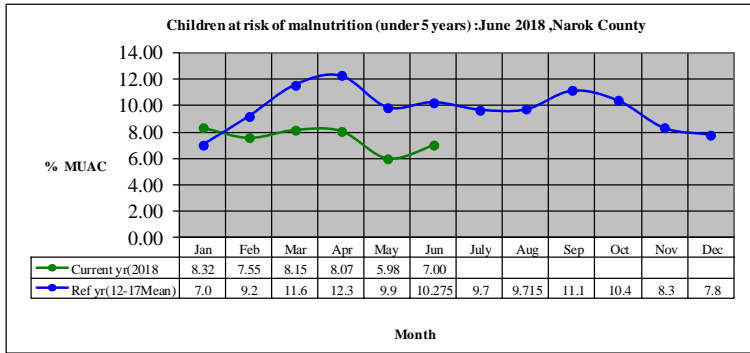


Figure 14

one percent. The highest number of children at risk of malnutrition was still being witnessed in Mosiro and Naroosura wards in pastoral livelihood zone owing to poor dietary diversity coupled with low household milk consumption.

The dietary diversity in mixed farming livelihood zone has improved slightly due to availability of green vegetables and cereals. This zone harvested maize and beans during the month under review which contributed positively to children's nutrition status coupled with stable milk intake. The current rate of malnutrition is below the normal range compared to the long term average as shown by Figure 14.

5.3.2 Health

- The county experienced increased cases of fever due to change of weather though it is not alarming.

5.4 COPING STRATEGIES

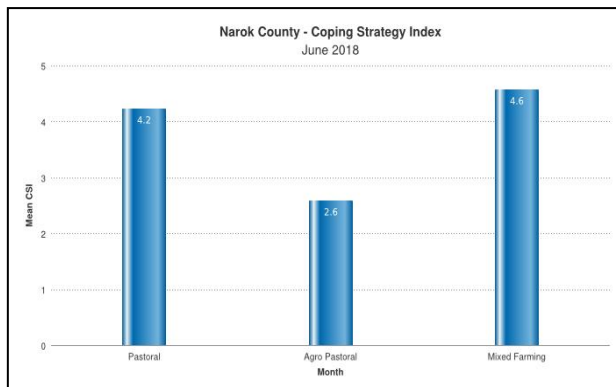


Figure 15

Households employed less unusual coping strategies in accessing food across all the livelihood zones as shown by Figure 15. The mixed farming and pastoral livelihood zones had higher CSI compared to agro-pastoral livelihood zone. This implies that households in the pastoral and mixed farming livelihood zone employed more coping strategies compared to those in other zones who can sell livestock, livestock products and crops to

purchase food. The coping strategies are normal at this time of the year

6.0 CURRENT INTERVENTION MEASURES (ACTIONS)

6.1 NON-FOOD INTERVENTIONS

- Malnutrition screening has been concluded. It was being conducted by NDMA in collaboration with Ministry of Health through EU/DCF support in Narok East, Narok South and Transmara East Sub counties.
- NDMA has undertaken five participatory disaster risk assessments (PDRA) in five wards with the aim of establishing community structures at ward level for preparedness and resilience activities.
- The Regional Pastoral Livelihood Resilience Project is undertaking some drought response interventions which include livestock restocking, animal feeds supplementation of 6,000 bags of range cubes and 5,000 pieces of mineral blocks. Beneficiary targeting has been done and distribution logistics are being worked on.

6.2 FOOD AID

- No food aid was issued during the month.

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No major conflict issues were observed during the month under review. However, the Government is carrying out disarmament exercise in Transmara East and Transmara West sub counties.

7.2 Migration

- There were no incidences of migration in the county.

7.3 FOOD SECURITY PROGNOSIS

- The performance of the long rains season was above normal. This has had a positive impact on various food security sectors. Forage conditions have significantly improved, a factor which is likely to enhance livestock productivity for the next three months. Water situation is expected to stabilise for the next two months. Malnutrition cases are likely to go down further due to expected improvement in milk production and consumption. However, there is likely to be a delayed harvest of some crops which were affected by excessive rains that led to water logging which hampered planting and germination of crops.

8.0 RECOMMENDATIONS

- Some limited vaccination against blue tongue disease is required in Narok West and Narok South sub counties.
- Water hygiene and sanitation standards must be observed in order to minimise chances of outbreak of water borne diseases.
- Repair of damaged infrastructure due to heavy rains particularly rural access roads. The Ntulele-Mosiro road should be given top priority to ease movements of goods to the markets.
- Establishment of preparedness activities especially in water and livestock sectors will boost the resilience level of the vulnerable communities to cope better in future against the effects of drought.